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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/897,102	07/03/2001	Yoshihiro Ishikawa	210681US2	9247

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OBLON, SPIVAK, MCCLELLAND, MAIER & NEUSTADT, P.C.
1940 DUKE STREET
ALEXANDRIA, VA 22314

EXAMINER

PEREZ, ANGELICA

ART UNIT	PAPER NUMBER
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2684

DATE MAILED: 02/02/2004

8

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/897,102

Applicant(s)

ISHIKAWA, YOSHIHIRO

Examiner

Angelica M. Perez

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 03 July 2001.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-21 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-21 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. §§ 119 and 120

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☒ Certified copies of the priority documents have been received in Application No. 09/897,102.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.
- 13) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.
a) ☐ The translation of the foreign language provisional application has been received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 3 & 5 6) ☐ Other: _____

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1-14 is rejected under 35 U.S.C. 103(a) as being unpatentable over Wallstedt (Wallstedt et al.; US Patent No.: 5,854,981) in view of Balogh (Balogh, Peter; US Pub. No.: 2001/0024953 A1).

Regarding claim 1 and 8, Wallstedt teaches of an operation data creating method and apparatus (column 4, lines 7-11 and the abstract) for creating operation data indicating with respect to each base station other base stations related to each base station (column 4, lines 28-34), based on a communication quality level (column 4, lines 37-42) with respect to each base station at each local position within a service area in a mobile communication system (column 4, lines 31-33) which includes a plurality of base stations set up within the service area (figure 1, items B1-B10) and a mobile station (figure 1, items M1-M10) which makes a wireless communication with the base stations (figure 1), the operation data creating method comprising the steps of: creating quality information indicating the communication quality level with respect to each base station at each local position within the service area (column 4, lines 58-66).

Wallstedt does not specifically teach of selecting base stations having a

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second or subsequent communication quality level at each local position where the same base station of interest has a highest communication quality level, based on the created quality information with respect to each base station at each local position; and creating the operation data indicating the selected base stations as the other base stations related to the base station of interest having the highest communication quality level.

In art related to mobility in wireless communication systems, Balogh teaches of selecting base stations having a second or subsequent communication quality level at each local position where the same base station of interest has a highest communication quality level, based on the created quality information with respect to each base station at each local position; and creating the operation data indicating the selected base stations as the other base stations related to the base station of interest having the highest communication quality level (page 1, paragraph 0006 and 0007).

It would have been obvious to a one of ordinary skill in the art at the time the invention was made to combine Wallstedt's method for creating data based on a best quality level with Balogh's second access point with the best connection attributes in order to have a faster and more reliable back up system for better communication.

Regarding claims 2 and 6, Wallstedt in view of Balogh teaches all the limitations of claim 1. Wallstedt further teaches where the communication quality level with respect to each base station at each local position within the service area is computed by estimation according to a predetermined algorithm (column

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5, lines 8-13; where the matrix is an algorithm), and the quality information is created based on a computed result (column 5, lines 13-16).

Regarding claims 3 and 10, Wallstedt in view of Balogh teaches all the limitations of claim 1. Wallstedt further teaches where: the communication quality level with respect to; each base station at each local position within the service area is measured (column 5, lines 8-13), and the quality information is created based on a measured result (column 5, lines 13-16).

Regarding claims 4 and 11, Wallstedt in view of Balogh teaches all the limitations of claim 1. Wallstedt further teaches where: one of the base stations having the second or subsequent communication quality level is selected if the same base station having the second or subsequent communication quality level at a plurality of local positions, when selecting the base stations having the second or subsequent communication quality level at each local position where the same base station of interest has the highest communication quality level (page 4, paragraphs 0039 and 0040).

Regarding claims 5 and 12, Wallstedt in view of Balogh teaches all the limitations of claim 1. Wallstedt also teaches of creating a list having the base stations arranged at positions in an order from a highest communication quality level based on the created quality information, with respect to each local position (column 9, lines 39-44); Balogh further teaches of selecting base stations located at a second or subsequent position in each list having the same base station positioned at a first position having the highest order in each list (page 4, paragraph 0039); and creating operation data indicating the selected base

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stations as the other base stations related to the base station located at the first position having the highest order in each list (page 4, paragraph 0040).

Regarding claim 6 and 13, Wallstedt and Balogh teach all the limitations of claim 5. Balogh also teaches, where: the base stations are successively selected from the positions having the higher order in each list, when selecting the base stations located at the second or subsequent position in each list having the same base station positioned at the first position having the highest order in each list (page 1, paragraph 0006), and the operation data created indicate the selected base stations as the other base stations related to the base station at the first position having the highest order in each list, in a state where the selected base stations are arranged in the selected order (pages 4 and 5, paragraph 0040).

Regarding claims 7 and 14, Wallstedt and Balogh teach all the limitations of claim 6. In addition, Balogh teaches, where: score information corresponding to a number of the same base station located at the same position in each list is generated, when successively selecting the base stations located at the second or subsequent positions in each list having the same base station located at the first position having the highest order in each list, from the base stations located at positions having the higher order in each list (page 5, paragraph 0048), and Wallstedt teaches where the operation data created indicate the selected base stations as the other base stations related to the base station at the first position having the highest order in each list, in a state where the score information is

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made to correspond to the same base station located at the same position in each list (column 14, lines 34-38).

3. Claims 15-21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Wallstedt in view of Balogh as applied to claim 1 above, and further in view of Spear (Spear Stephen L.; US Patent No. 6,289,220 B1).

Regarding claim 15, Wallstedt and Balogh teach all the limitations as described in claim 1.

Wallstedt and Balogh do not specifically teach of a computer-readable storage medium which stores a program for causing a computer to carry out a process as described in claim 1.

In related art concerning generating neighbor cell lists in a cellular environment having a first cell and a plurality of neighbor cells, Spear teaches of a computer-readable storage medium which stores a program for causing a computer to carry out a process similar to the one described claim 1 (column 4, lines 50-59).

It would have been obvious to a one of ordinary skill in the art at the time the invention was made to combine Wallstedt and Balogh's method for creating operation data with Spear's computer-readable storage medium in order to carry out the process.

Regarding claim 16-19, Wallstedt in view of Balogh teaches all the limitations of claim 2-5. Furthermore, Spear teaches the limitations of claim 15.

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Regarding claim 20, Wallstedt and Balogh teach all the limitations of claim

6. Spear further teaches the limitations of claim 19.

Regarding claim 21, Wallstedt and Balogh teach all the limitations of claim

7 and Spear teaches the limitations of claim 20.


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Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Angelica Perez whose telephone number is 703-305-8724. The examiner can normally be reached on 7:15 a.m. - 3:55 p.m., Monday - Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nay Maung can be reached on 703-308-7745. The fax phone numbers for the organization where this application or proceeding is assigned are 703-872-9314 for regular communications and for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the TC 2600's customer service number is 703-306-0377.


Angelica Perez
(Examiner)



Nay A. Maung
(SPE)

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January 26, 2004